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Priorities for action of major groups concerning transport, chemicals, waste management, mining, and the 10-year framework of programmes on sustainable consumption and production patterns**

Note by the Secretariat

1. The Johannesburg Plan of Implementation adopted at the World Summit on Sustainable Development[1] and the decisions of the eleventh session of the Commission on Sustainable Development[2] called for the strengthened involvement and enhanced participation of major groups in the activities of the Commission and in the implementation of Agenda 21,[3] the Programme for the Further Implementation of Agenda 21[4] and the Johannesburg Plan of Implementation.

2. The Bureau of the nineteenth session of the Commission on Sustainable Development decided to continue to build on the participatory practices of previous

* E/CN.17/2011/1.

** The views and opinions expressed in this note do not necessarily represent those of the United Nations.

[1] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

[2] *Official Records of the Economic and Social Council, 2003, Supplement No. 9* (E/2003/29).

[3] *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992* (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I, resolution 1, annex II.

[4] General Assembly resolution S-19/2, annex.

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sessions of the Commission and of the World Summit on Sustainable Development[5] by inviting major groups to contribute their written views as a basis for participation in multi-stakeholder dialogues and interactive discussions at the nineteenth session of the Commission.

3. The organization of the input and the contributions of major groups to the nineteenth session of the Commission was inspired by practices used at past sessions through a self-selected multi-stakeholder steering group composed of organizing partners from network organizations representing the nine major groups.[6] The organizing partners are: for women, Women in Europe for a Common Future, Baha'i International Community, Voices of African Mothers, and Netherlands Women's Council/BPW International; for children and youth, the Youth Caucus of the Commission on Sustainable Development; for indigenous peoples, Tebtebba — the Indigenous Peoples' International Centre for Policy Research and Education, and the Indigenous Environmental Network; for non-governmental organizations, the Sustainable Development Issues Network (through the Northern Alliance for Sustainability, Consumers International, and the Institute for Security Studies); the International Council for Local Environmental Initiatives — Local Governments for Sustainability, for local authorities; for workers and trade unions, the International Trade Union Confederation (ITUC) and Trade Union Advisory Committee to the OECD (TUAC); for business and industry, the International Chamber of Commerce, International Council of Chemical Associations (ICCA) and United States Council for International Business; for the scientific and technological community, the International Council for Science and the World Federation of Engineering Organizations; and for farmers, the International Federation of Agricultural Producers. These organizing partners facilitated the preparation of the priorities for action of the major groups in the thematic areas of this Commission cycle, which are contained in the annex to the present note.

4. The present document outlines the contributions of major groups to the discussions on policy options and possible actions to expedite implementation. It builds on the discussion papers prepared by them for the eighteenth session of the Commission, which presented their overall views on the status of implementation of commitments related to the thematic issues on the agenda, including reference to cross-sectoral themes, successes and challenges of implementation and practical contributions.[7] The document presents policy opinions and proposed solutions for the consideration of policymakers in their deliberations, and will serve as a starting point for the participation of major groups in the intergovernmental preparatory

[5] The multi-stakeholder participation in the sessions of the Commission became a standard part of its work programme at its sixth session through the launch of the dialogue segment in response to General Assembly resolution S-19/2, recommending that the Commission strengthen its interaction with representatives of major groups, inter alia, through greater and better use of focused dialogue sessions. The dialogue segments launched in 1998 have been recognized as a unique participatory model for effectively engaging major groups and governments in a genuine dialogue on specific sustainable development issues.

[6] Section 3 of Agenda 21 defines major groups as comprising women, children and youth, indigenous people, non-governmental organizations, local authorities, workers and trade unions, business and industry, the scientific and technological community, and farmers.

[7] The discussion papers of the major groups for CSD-18 are contained in E/CN.17/2010/11 and E/CN.17/2010/11/Add.1-9, available at: http://www.un.org/esa/dsd/resources/res_docucsd_18.shtml.

meeting and at the nineteenth session of the Commission. While major groups differ in the identification of needs to be met and possible synergies that may be adopted, they concur on a number of issues, including on the essential role they play as real partners in support of common efforts for sustainable development.

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I. Women

1. Integration of policies is an essential step towards sustainable development. This paper focuses on interlinkages, cross-cutting issues, and means of implementation. Women call for implementation goals with timelines and targets leading to binding agreements, as a conclusion of the Commission for Sustainable Development policy year, to ensure real action.

A. Cross-cutting issues

Coherence in implementation

2. Women call for coherence in the implementation of policies and programmes. Previous outcomes and commitments of the United Nations Conference on Environment and Development and the World Summit on Sustainable Development, sessions of the Commission on Sustainable Development and the Millennium Development Goals are not being adequately implemented and there is not enough coherence in the implementation of the multilateral environmental agreements.

3. The United Nations Summit on the Millennium Development Goals concluded that women are key to development and that Goal 3 (Promote Gender Equality and Empower Women) requires special attention. Women are insufficiently represented and lack participation in decision-making and planning processes. Attention should be given to access for women to information, education and training, and support for women's organizations. Women urge all governments to implement existing recommendations, treaties and conventions regarding the position of women. They urge the United Nations system and Member States to create mechanisms to enhance coherence between the Commission for Sustainable Development and the Commission on the Status of Women.

Gender targets

4. Thirty per cent participation of women in decision-making is seen as a minimum level to assure their full participation. Women call upon governments to aim for 50 per cent participation of women at all levels of decision-making and to support this target by implementation measures such as gender-sensitive budgeting, capacity-building and strengthening of women's leadership skills. Gender indicators and disaggregated data collection should be a part of monitoring and evaluation programmes, and used to improve policies.

Access to information and justice

5. The Principles in the Rio Declaration on Environment and Development (the Rio Principles) and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the Aarhus Convention) recognize the right to information, including the right to accurate and transparent product information, enabling consumers to make informed decisions. Access to accurate and timely information is essential for effective participation in sustainable development. Internationally recognized agreements, such as the Aarhus Convention, should be adopted as globally binding guidelines.

Access to funding mechanisms

6. Sustainable development needs all actors to be fully engaged, including women. However, existing funding mechanisms such as the Clean Development Mechanism and the Global Environment Facility have often focused on inefficient large-scale projects and are not easily accessible for women and community-run projects, due to the bureaucracy and high upfront investment. Women urge governments and financial institutions to engage with women's organizations to design financial mechanisms that are directly accessible by communities and households.

B. Mining

7. Many mining activities destroy livelihoods and the environment. In particular uranium mining has brought great injustice to the indigenous peoples on whose territories uranium is mostly mined, and whose lands have become uninhabitable. Women call upon governments to develop a United Nations framework for sustainable mining, which includes an international compliance tribunal/mechanism and requires mining companies to take full responsibility for environmental liabilities and the health of workers and neighbouring communities, both during and after mining activities. Legacy costs should not be left to the host governments.

8. As long as the repair of damage and clean-up of mining waste, in particular of uranium mining, is not guaranteed, governments should impose a moratorium on the opening of new mining sites. For unsustainable mining activities which need to be closed (e.g. asbestos and coal), creation of sustainable jobs and a fair job transition for local people after the closure of a mine should be ensured. Women call upon governments to create a global plan and fund for clean-up of radioactive uranium mining tailings, including from industry contributions. Women call upon governments to create an independent control organization to monitor all uranium mining and waste operations.

C. Waste

9. Women call upon governments to enforce the "polluter pays" principle at all levels. Financial mechanisms are required to clean up waste and repair damage, for example, through charges and fees for return-and-recycle programmes. Waste policies should be based on the "waste hierarchy" with priority given to actions in the following order: (a) avoid, (b) reduce, (c) reuse, (d) recycle, and where landfills are phased out entirely, assure mandatory substitution of substances which are hazardous and cannot be reused.

D. 10-year framework of programmes on sustainable consumption and production

10. The 10-year framework of programmes to support initiatives on sustainable consumption and production should include measures to achieve "zero-waste", energy efficient, low-carbon economies, based on the life cycle approach.

11. Women offer the following guidance in developing the 10-year framework of programmes:

(a) Incorporate a gender perspective in sustainable consumption and production projects and policies;

(b) Address women's differing sustainable consumption and production needs and priorities in the North and South;

(c) Analyse obstacles to, and opportunities for, scaling up sustainable consumption and production initiatives to benefit women;

(d) Provide education for girls, vocational and technological training for women and adult literacy programmes, as part of every intervention;

(e) Acknowledge and incorporate women's traditional knowledge and their contribution to the green economy.

E. Chemicals

12. Women's health is affected by harmful chemicals in different ways. Women are also the "first environment" for the child, potentially transferring harmful chemicals to the developing child. Women call on governments to apply the precautionary principle in chemical policies, when there is uncertainty about possible harm, ensuring that women and children are protected, by reversing the burden of proof and applying the "no data, no market" principle. In particular substances of concern should not be allowed for widespread use in consumer products until their safety has been proven and global guidelines and regulations established. This applies particularly to substances suspected to be:

- Hormone disrupting (such as bisphenol-A and many phthtalates — plastic softeners)
- Reprotoxic, mutagenic, carcinogenic, bio-accumulative and persistent
- Able to cross the brain and placenta barriers (such as nanomaterials).

13. The women's group furthermore supports a progressive ban on the production and use of highly hazardous pesticides; financing for a comprehensive clean-up of obsolete chemical/pesticide stockpiles; a global ban on lead in paints; and a global mercury treaty by 2013 that effectively addresses all mercury from human activities.

F. Transport

14. Investment in the transport sector often neglects the needs of women and the non-motorized poor. Women need to be involved in transport planning at all levels. Women call upon governments to develop low-carbon integrated transport plans, which optimize complex transport modalities (walking, cycling, public and private transport) and urban-rural linkages. During the fourteenth and fifteenth sessions of the Commission on Sustainable Development, many countries called for measures to combat pollution in the form of "fine particle dust" from transport emissions; these measures should be incorporated into the recommendations of the nineteenth session of the Commission.

II. Children and youth

A. Mining

15. Children and youth call for:

(a) The eradication of all forms of child labour in the mining industry in accordance with the Convention on the Rights of the Child and International Labour Organization (ILO) Conventions No. 138 (1973) concerning the Minimum Age for Admission to Employment and No. 182 (1999) concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour. Initiatives should be in line with the Roadmap for Achieving the Elimination of the Worst Forms of Child Labour by 2016;

(b) The creation of alternative income-generating activities for communities to prevent child labour;

(c) An increase in the technical and financial ability of small-scale artisanal miners to decrease their environmental and health impacts;

(d) The adoption of an international legally binding instrument which governs the extraction and utilization of mining resources, committing parties to:

(i) Managing the social dimension of mining-related activities by developing social support strategies that ensure community participation, including children and youth;

(ii) Involving impacted communities in mining planning processes and intervening in cases of social instability and potential conflict;

(iii) Ensuring transparency in resource extraction and production to eradicate the financing of armed conflict and human exploitation through the purchase of mining resources and legislating for compulsory disclosure by producers to consumers of environmental and population impact;

(iv) Including social, economic and environmental issues in mining negotiations between host governments and mining companies, involving relevant stakeholders;

(v) Defining appropriate terms on mining sites and designating clear zones that are exempt from mineral extraction, recognizing that this is vital for aquatic and other ecosystem preservation. Zones must be created and managed, guided by the precautionary principle that where environmental effects are unclear, environmental liability for site remediation and clean-up should be ensured.

B. Chemicals

16. Children and youth call for:

(a) Strengthening the governance of chemicals management through supporting the development, implementation and monitoring of national regulatory policies and legislation;

(b) Extending the responsibility of governments and corporations for health and environmental damage in the chemical industry and supporting restoration programmes for people and ecosystems impacted by chemical contamination;

(c) Internalizing the cost of chemicals management by, inter alia, strengthening the work of the United Nations Environment Programme (UNEP) on financing the chemicals agenda;

(d) Providing financial and technical resources through cooperation, to allow full implementation of existing multilateral chemicals agreements;

(e) Encouraging the meaningful and active participation of civil society actors in government policies and projects on chemical safety.

C. 10-year framework of programmes on sustainable consumption and production patterns

17. Children and youth call for:

(a) Promotion of the achievements of already agreed sustainable development objectives;

(b) Development of a strong and comprehensive vision of sustainable consumption and production through:

(i) Addressing local and global perspectives on economic and social equity and environmental protection and underlining the intrinsic link between consumption and production to bring a systematic approach to addressing change;

(ii) Provision of a platform for international cooperation and partnership for all stakeholders to deliver sound benchmarks and measurement tools, such as a set of multidimensional measurement standards to monitor and evaluate progress towards sustainable consumption and production;

(iii) Consolidation of knowledge sharing, research and analysis through partnerships with all involved actors, increase in production transparency and development of easy-to-understand labelling;

(iv) Integration of the "polluter pays" principle in all production, decoupling of economic growth from environmental impacts, shifting of taxes on non-sustainable goods to promote sustainable alternatives, and promotion of new sustainable consumption and production patterns through sustainable public procurement practices;

(v) Support for the integration of education for sustainable development complemented by a platform to stimulate, recognize and support non-formal education, particularly as provided by youth-led organizations;

(vi) Promotion, support and enabling of sustainable entrepreneurships and green economies delivering employment for and protecting the rights of young people;

(vii) Support for national and regional policies on sustainable consumption and production and a shift to sustainable consumption and production patterns;

(viii) Strengthening of the meaningful and active participation of children and youth in the implementation of the 10-year framework of programmes.

D. Waste

18. Governments should adopt zero-waste plans by 2020 through:

(a) Closing materials and nutrient cycles;

(b) Creating effective solutions to waste management through research, knowledge transfer, valorization and dissemination;

(c) Applying the "cradle-to-cradle" approach in waste management;

(d) Transition arenas, which ensure the participation of all relevant stakeholders in systematically managing the change to more sustainable materials and nutrient use;

(e) Reuse, recycling and resource recovery programmes, especially in developing countries.

19. It is imperative that there is:

(a) A total (and enforced) ban on the dumping of nuclear and e-waste;

(b) Effective treatment of hazardous waste and a ban on or minimization of its transboundary movement. In addition the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa must be fully implemented and waste prevention and minimization policies put in place.

It is also imperative that humane working conditions are created for people in the waste sector, especially youth.

E. Transportation

20. Children and youth call for the development, implementation, maintenance and adaption of transportation methods, infrastructures and networks to increase long-term sustainability. This includes:

(a) Phasing out unsustainable transportation systems to eliminate the negative consequences (such as not respecting the rights of communities) inherent in their use. Enabling integrated urban planning and upgrading;

(b) Promoting collaboration between the private and public sector to introduce the use of alternative transportation systems and cost-effective and efficient transport services;

(c) Adopting smart, innovative and efficient means of transportation;

(d) Using technological innovations to optimize overall network efficiency and utilization of public transport systems and to lower environmental costs;

(e) Encouraging the use and transfer of green technology;

(f) Internalizing the environmental and social costs of transportation.

F. Cross-cutting issues

21. It is imperative to:

(a) Ensure universal primary education with equal access for boys and girls;

(b) Promote formal and non-formal education regarding sustainable development;

(c) Prevent and eliminate all forms of child labour;

(d) Protect human and environmental health through command-and-control regulatory systems based on monitoring and enforcement actions;

(e) Strengthen regional initiatives through increased funding and cooperation with regional governments and organizations;

(f) Strengthen civil society capacities in sustainable institutional development frameworks;

(g) Promote sustainable behavioural patterns and lifestyles to enable increased translation of the concept of sustainable development into action;

(h) Protect and manage the natural resource base as part of economic and social development activities, including as a strategy in poverty eradication.

III. Indigenous peoples

A. Introduction

22. Indigenous peoples continue to practise more sustainable ways of living characterized by a holistic development model with a small ecological footprint; underpinned by their indigenous values such as reciprocity, diversity, solidarity, accountability, and their cultural views in harmony with Mother Earth.

23. Sustainable development for indigenous peoples is linked to the respect, protection and fulfilment of their human rights, as embodied in the United Nations Declaration on the Rights of Indigenous Peoples, which provides the overarching framework and minimum standard in their engagement with this multi-stakeholder Commission on Sustainable Development process.

24. Indigenous peoples call on governments to provide for the full and effective participation of all stakeholders, including indigenous peoples, local communities, women and youth at all levels of Commission processes.

B. Mining

25. States should provide stricter and more enforceable frameworks of law and regulations that protect the rights of indigenous peoples' lands and territories, and respect traditions that protect their environment from the impacts of mining. The efforts of indigenous peoples to live sustainably have been damaged and disrupted by an exploitative approach to development in which unsustainable extractive industries have been central.

26. Governments, the United Nations system and the international community, working in cooperation with mining-affected communities, should establish credible and independent information and monitoring mechanisms. There should be assistance for capacity-building for local communities for making better-informed decisions and for sustained monitoring of impacts.

27. Governments should establish robust mechanisms for transparency and corporate social responsibility in the operations of extractive industries and to make available to all affected local communities all information relating to the mining sector.

28. Mining activities have been the source of conflict and controversy because they provide great wealth for corporations, and inflict grave destructive impacts and rights violations on affected communities. States should provide more effective means in their domestic laws for protection, remedy and redress for communities who have suffered through the actions of mining corporations. This should include States whose corporations and investment institutions profit from activities outside their territories.

29. Indigenous peoples call upon governments to develop and promote enforceable international and national regulations to outlaw destructive mining practices, including opencast mining, river and marine waste disposal and strip mining resulting in forest destruction or damage to marine ecology.

30. In line with the recommendations of the Extractive Industries Review to cut investment in fossil fuel mining, the World Bank, States and those banks committed to the Equator Principles should redirect their investment into more sustainable energy generation.

31. Uranium mining should be ended, because nuclear power generation and its mining processes are unsafe and unsustainable, with catastrophic impacts upon the health and environment of local communities affected by such operations. States should require monitoring, clean-up of the aftermath, and compensation for all victims of uranium mining.

32. Indigenous peoples call for the establishment of an adequate financial bond from corporations to be used in case of mine accidents and rehabilitation during closures, and to provide dedicated funding and mechanisms for victims of destructive mining activities and continued development of communities affected by mining.

33. They also call for the harmonization and repeal of mining legislation that does not adhere to international human rights standards to reduce conflicts and intersectoral competition and for the strengthening of regulations for delineation of zones that should be barred from the extractive industries, such as the sacred sites of indigenous peoples, water sources, and all ecosystems that provide livelihoods to local communities.

34. Access to water to sustain life and agriculture should be prioritized over industrial exploitation.

C. Waste management

35. Standards and regulatory frameworks should be strengthened to ensure greater and sustained protection of the environment from waste contamination. This includes progressive and substantial reductions in mine waste, since mining generates levels of toxic waste that are greater in volume and potential impact than the waste from even the largest cities, and newer mines generate ever-greater volumes of waste. The disturbing practice of exploiting the poverty of some indigenous communities to enter into contracts for dumping toxic wastes in their territories, despite the clear health and environmental risks incurred, needs to be replaced by programmes to reduce all waste and eliminate dangerous wastes from the global system.

36. Indigenous peoples urge governments to:

(a) Establish strong mechanisms for the regulation and management of electronic waste (e-waste);

(b) Promote the reuse, recycling and substitution of metals, minerals and other materials to help minimize all types of waste.

D. Transportation

37. More than 96 per cent of the energy presently used for transport comes from fossil fuels, particularly petroleum. There is increasing concern about the pollution effects from the transport sector on health and quality of life and there is a need for coordinated and alternative public transportation systems directed at minimizing carbon emissions and the impacts of pollution.

38. More should be invested in the development of cleaner forms of fuel-efficient technologies and stricter regulations imposed to encourage fuel economy improvements for vehicles. The current situation should be rectified, whereby affordability takes precedence over sustainability in the transport planning of most developing countries and is also responsible for the construction of substandard roads.

39. Indigenous peoples living in coastal areas and marine environments call on governments to invest more in local indigenous low-carbon means of coastal transportation that have been used for millenniums.

E. Sustainable consumption and production

40. More sustainable ways of living should be promoted, integrating indigenous knowledge, practices and cultures as models. Indigenous peoples have long sustained many of the most vital and vulnerable ecosystems on Earth and are not lacking in contributing solutions to sustainable consumption and production.

41. At the eighteenth session of the Commission on Sustainable Development, the Secretary-General reported on, and many delegates made clear their concern over, the serious negative impacts of mineral extraction and processing upon affected communities and the global environment. Greater social and environmental safeguards are needed to end or reduce the speculative acceleration of the extraction

of non-renewable resources. Greenfield site mining should be minimized and global and national action plans should be made to maximize recycling and substitution, and minimize further exploitation through extraction of non-renewable resources, including minerals.

42. More information about sustainable consumption and production should be disseminated beyond urban centres to inform and mobilize the rural population, including indigenous peoples and local communities. The specific role and contributions of women and youth in developing more widespread sustainable production and consumption should be strongly supported.

IV. Non-governmental organizations

43. Because sustainable development allows humanity to protect and improve life in all its forms and expressions, the following actions are necessary.

A. Waste

44. In relation to waste, the following should be undertaken:

(a) Work on the transition to closing materials and nutrient cycles to a zero-waste economy, being the real measure of sustainability, as waste management is an indicator of failed materials cycles;

(b) Appreciate regional models and approaches, as low- and middle-income countries deserve more than an imperfect copy of a non-working solid waste paradigm;

(c) Act upon the need for more documentation, data collection, analyses and political commitment for waste management and the enforcement of relevant legislation, including mandatory public dissemination of knowledge of health and environmental risks;

(d) Introduce extended producer responsibility and accountability;

(e) Implement, on an international scale, obligatory and clearer guidelines on shipbreaking http://www.greenpeace/india/toxics-free-future/ship-breaking/green peace-demands (International Maritime Organization);

(f) Take effective actions to clear away plastics from the oceans;

(g) Effect and enforce a total ban on the dumping of e-waste and nuclear waste.

B. Chemicals

45. In relation to chemicals:

(a) Develop and implement national regulatory policies that require adequate safety data on the impact of chemical substances on humans, livestock, and other animals before sale is allowed;

(b) Fully implement on an expedited schedule the Food and Agriculture Organization of the United Nations (FAO) progressive ban on the production and use of highly hazardous pesticides;

(c) Expedite financing, inventory, environmentally sound treatment, and comprehensive clean-up of obsolete stockpiles;

(d) Negotiate a global mercury treaty by 2013 that effectively addresses all sources of mercury from human activities;

(e) Effect a global ban on lead in paints through the UNEP/World Health Organization Global Alliance and national regulations;

(f) Develop global guidelines on nanomaterials, including the protection of workers, consumers, and the environment at all stages of the life cycle;

(g) Ensure the active role of the health sector in chemical safety by increasing the pace of work dedicated to eliminating asbestos-related diseases;

(h) Implement meaningful participation of civil society in government committees and projects concerning chemical safety;

(i) Continue the work of UNEP on financing the chemicals agenda and begin development of a global cost recovery scheme to internalize the cost of chemicals management, along with pilot projects in selected countries;

(j) Increase the availability of financial and technical resources for developing and transition countries to enable full implementation of multilateral chemicals agreements;

(k) Implement and enforce sound laws for safety measures, proper maintenance of equipment and proper and regular inspection by duly appointed authorities;

(l) Make companies, their owners, suppliers and subsidiaries liable for (accidental) health and environmental damages, including a liability for risk management and a responsibility for compensating the victims and their families for death and other health effects.

C. Transport

46. In relation to transport:

(a) Recognize that sustainable transport is a vital component in creating sustainable economies, but that progress has been very slow;

(b) Act upon the need to put mass transit options and non-motorized transport in place, giving priority to investment in their infrastructure and making them the backbone of urban transport systems, this being the only alternative to the sharply rising level of motorization in the developing world;

(c) Analyse transport patterns, differentiating between the economic roles of men and women and adjust planning to remove gender disadvantages;

(d) Ensure sound planning of transportation infrastructure to reduce impacts on biodiversity;

(e) Collect sound data on all relevant levels and undertake capacity-building programmes;

(f) Implement fiscal frameworks that remove barriers and allow the internalization of external costs;

(g) Note that improved fuels and cleaner transport bring local improvements to air quality but do not reduce the dependence of the developing world on fossil fuels for its transport needs.

D. Mining

47. In relation to mining:

(a) Ensure that mineral development practices are consistent with the goals of sustainable communities and come about by free, prior and informed consent;

(b) Strengthen technical and strategic skills within communities faced with the impact of mineral development;

(c) Impose appropriate terms and conditions on mining and determine the "no go" places for mining, like water sources, sacred places, or fragile ecosystems;

(d) Advocate stronger sustainable consumption and production policies to improve efficiency in the use of minerals and reduce absolutely the risks they present and the use of them;

(e) Use the precautionary principle in the case of uncertain effects on the environment, human rights, animal welfare and biodiversity;

(f) Intervene in conflicts between the mining industry and affected communities, considering those conflicts as public issues instead of private conflicts;

(g) Develop mining only in order to satisfy fundamental human needs;

(h) Control corporate social responsibility and accountability to avoid corruption.

E. Sustainable consumption and production

48. In terms of sustainable consumption and production:

(a) Consider it from a systemic perspective aimed at reversing ecological and social trends to protect and improve life in all its forms and expressions;

(b) Consider it as the strategic path towards prosperity, to be achieved mindful of the limits to growth and the life support systems of the Earth. This goes beyond resource efficiency, embracing sufficiency in which global well-being can be achieved;

(c) Base global production on (a fair share of) the supply of natural resources, not on the demands of affluent consumers.

F. 10-year framework of programmes

49. This framework should be a cooperative partnership between United Nations agencies, governments, civil society and the private sector that through the next decade will encourage, support and help enable the many thousands of initiatives around the world that are now being undertaken at the local, national and global levels to change production and consumption patterns. This must be done through a system of partnerships between those at the top levels of institutional governance and policy and those on the ground doing the work.

50. An international programme and legal frameworks should be developed to (a) support countries in the implementation of sustainable consumption and production policies, policy coherence across government departments, the use of the full range of policy instruments, and monitoring; (b) support formal and informal education and capacity-building to fundamentally change values, lifestyles and behaviour, as more than green technology is needed to achieve sustainability; (c) ensure research and analysis, develop indicators and monitor progress, provide technical (e.g., to enable implementation of United Nations consumer guidelines), financial and scientific analysis, and establish multi-stakeholder dialogues on sustainable consumption and production.

51. Traditional knowledge, local practices and rural communities are aspects of sustainable consumption and production and should be reflected in the programmes. Thus the 10-year framework of programmes on sustainable consumption and production has to go beyond the green economy, and should lay more emphasis on the human rights and other social values needed to achieve sustainable development and well-being for all, now and in the future.

G. Interlinkages

52. See chapter I above.

V. Local authorities

A. Introduction

53. Local authorities are at the heart of debates on sustainable consumption and production, transport and waste. More than half of the global population already lives in cities and it is predicted that by 2050 about two thirds of the global population will live in urban communities. Cities concentrate people, goods, capital investment, infrastructure and knowledge. The way local governments and their residents choose to act with regard to sustainable consumption and production, transport and waste can significantly contribute to making this planet more sustainable.

54. Having reviewed progress at the local, national and global levels on these matters for the eighteenth session of the Commission on Sustainable Development, this paper presents priorities for policy action at all levels from the perspective of local authorities.

B. Sustainable consumption and production

55. The proximity to citizens of local authorities puts them in a key position to understand the needs, challenges and opportunities related to sustainable consumption and production and to make it happen. These conditions differ between local communities in developing and developed countries, as the former need to combine sustainable consumption and production with development needs, whereas the latter need to find ways to maintain and improve quality of life while reducing pressures on the environment.

56. Local authorities play a key role in sustainable consumption and production practices. They can influence the behaviour of consumers and businesses by means of legislation and regulation, implement sustainable public procurement policies and make their own activities more sustainable.

57. From a local authority perspective, there are two major sustainable consumption and production policy priorities at the global level. The first priority is to strengthen the global sustainable consumption and production framework, the Marrakech Process, as an international multi-stakeholder forum acknowledging the key role of local authorities. The framework should also comprise (binding) international targets and indicators for sustainable consumption and production. The second priority is to integrate local, national, regional and international efforts, including providing a better overview on available tools for sustainable consumption and production for local authorities.

58. The needs of local authorities for implementing sustainable consumption and production can be summarized under three major points. First, they need guidance, support and capacity-building on tools, which can help to mainstream sustainable consumption and production into all policy areas, reduce administrative costs and support monitoring of progress. Secondly, they need to cooperate and engage directly with consumers, business and academia to foster new business models and more sustainable lifestyles. Finally, they need to learn from each other, while at the same time finding innovative and creative solutions targeted to the specific needs of their cities.

59. One area of sustainable consumption and production of particular importance and relevance for local authorities is sustainable procurement. In addition to the above factors, which are also applicable to sustainable procurement, it needs to be recognized as a crucial mechanism for tackling many environmental, social, and economic issues. Currently not enough local decision-makers are aware of or understand sustainable public procurement. Given that public procurement is the biggest single customer-side driver on the market, addressing this skills shortage to ensure more sustainable procurement can significantly contribute to making consumption more sustainable.

C. Transport

60. There is nothing new about the fact that urban mobility is in a crisis in many cities around the globe. Unsustainable land use with low urban densities and the use of private cars and motorcycles have not only led to traffic congestion and a rapid increase in the accident rate. Politicians are also increasingly facing severe local air pollution and related health problems for their citizens and communities.

61. While the transport sector accounts for the greatest increase in greenhouse gas emissions and global coordinated efforts are necessary to counteract these, the necessary trend shift must also start at the local level.

62. The 2009 Bellagio Declaration on Transportation and Climate Change argues that any effective climate action is incomplete unless it addresses the overall performance of the transport sector. Moreover, any climate action in the transport sector should recognize the co-benefits of low-carbon sustainable transport policies, including improved health, reduced congestion, lower travel time and fewer accidents.

63. Thus a long-term strategy for urban transport policies with a comprehensive set of emission-reduction measures is recommended. Such policies should follow the so-called "avoid-shift-improve approach"; urban transport policy should take into account land-use developments in such a way as to reduce the distances people need to travel, achieve a shift to more sustainable modes and improve the overall efficiency of the transport system.

64. While national governments should act to strengthen vehicle and fuel technologies and explore alternate fuel sources, cities and communities in both developed and developing countries should aim to promote energy-efficient modes of transport, particularly public transport and non-motorized transport, such as walking and cycling.

D. Waste

65. Up to 1,000 million tons of waste per year are completely unmanaged, wasting resources, jeopardizing public health and harming the environment. Global waste is predicted by some to double in the next 20 years. Industrialized nations spend up to US$ 270 billion per year managing waste and it is important that these costs are incorporated into the supply chain and paid by consumers, rather than taxpayers. Truly sustainable systems require additional attention to genuine waste prevention and a shift towards cradle-to-cradle approaches. Waste generation needs to be decoupled from economic welfare and growth.

66. The application of relevant policy instruments is relatively well understood, and more work is now needed to extend their implementation. Three particular ideas ripe for application are environmental taxes, sustainable procurement and producer responsibility.

67. Environmental taxes are among the most cost-effective and efficient environmental policy tools available. Citizens and industry react to green taxes by changing their behaviour, especially if government gives a strong signal that it intends to maintain these taxes.

68. Sustainable consumption and production, and in particular sustainable procurement, have been discussed above. In addition to the benefits already mentioned, implementing sustainable procurement can also contribute to waste reduction.

69. Producer responsibility schemes can give producers an incentive to design products which use fewer and less hazardous resources, increase recycled material used in manufacturing, reduce wastage, and result in products that can be more

easily reused, dismantled and recycled. The threat of mandatory producer responsibility encourages industry to develop voluntary agreements, a softer approach which can be effective in delivering environmental improvements.

VI. Workers and trade unions

A. Chemicals

70. In relation to chemicals:

(a) Ensure that all workers are protected from chemical-related fatalities, injuries and diseases and that they enjoy decent working conditions in the chemicals sector, as well as in other sectors where chemicals are used. Improve worker training and awareness;

(b) Ratify and implement ILO Conventions No. 155 (1981) concerning Occupational Safety and Health and the Working Environment and No. 170 (1990) concerning Safety in the use of Chemicals at Work, and work towards the application of the Globally Harmonized System of Classification and Labelling of Chemicals;

(c) Develop and implement a strong regulatory framework regarding chemical hazards and national regulatory policies based on the precautionary principle, on the substitution principle and the "no data, no market" principle. Work towards a binding agreement based on an integrated approach to chemicals, including through the strengthening of the Strategic Approach to Integrated Chemicals Management (SAICM);

(d) Implement meaningful participation of trade unions and civil society in government committees and projects concerning chemical safety;

(e) Recognize the need for "just transition" strategies when changes in chemical policies might create hardship for workers and communities;

(f) Increase research and disseminate information on chemical hazards and on the impacts of unsustainable waste management on public health, occupational health and the environment;

(g) Prevent social and environmental dumping and illegal trafficking and implement the principles of extended producer responsibility and accountability;

(h) Develop global guidelines on nanomaterials, including the protection of workers, consumers, and the environment at all stages of the life cycle;

(i) Increase the availability of financial and technical resources for developing and transition countries to enable full implementation of multilateral chemicals agreements.

B. Transport

71. In relation to transport:

(a) Ensure public transport systems are adequate, efficient and affordable, and help workers to reach their jobs, education and markets;

(b) Promote ambitious public investments in sustainable infrastructure. Public transportation systems are a centrepiece of sustainable mobility strategies, which need to be promoted;

(c) Focus on infrastructure development in rural areas as it is vital for lifting poor people out of poverty. The lack of transport services is deeply related to exclusion, inequality and poverty;

(d) Implement policies which promote decent work in the transport chain, including the right to join a trade union and engage in collective bargaining;

(e) Public transport services should remain in — or be brought back under — local public accountability and control, including national or municipal ownership;

(f) Implement policies which enhance modal shift;

(g) Create fiscal frameworks that allow for the internalization of transport social and environmental costs, including the "polluter pays" principle;

(h) Reinforce and support the participation of trade unions and other stakeholders in the development and implementation of transport policies;

(i) Adopt a "reduce-shift-improve" framework:

(i) Reduce the movement of goods and people through good land use planning;

(ii) Shift movement from high-carbon to low-carbon modes of transportation, including shifting from private vehicles to public transportation and non-motorized transport, from air travel to high-speed rail, and from road freight to rail, sea and inland waterways;

(iii) Improve the energy efficiency of transport modes and vehicle technology to reduce emissions in the transport sector.

C. Mining

72. In relation to mining:

(a) Ensure the ratification and implementation of norms on occupational health and safety in mining, including ILO Convention No. 176 (1995) concerning Safety and Health in Mines;

(b) Reduce the negative social and environmental impacts of mining operations and compensate workers and communities for unsustainable mining practices;

(c) Recognize the role of mining sector trade unions in achieving decent working conditions in the sector;

(d) Develop upstream and downstream mining activities as a means of diversifying local economies, through a mix of regulatory and voluntary instruments;

(e) Ensure that the revenue from mining activities is fairly distributed within communities and benefits local and national sustainable development;

(f) Establish an international regulatory framework for extractive companies;

(g) Improve the precarious situation of all mineworkers, including small-scale mining workers;

(h) Impose appropriate terms and conditions on mining and in some cases prevent the development of projects that would adversely affect areas of ecological, economic and cultural significance and other land uses.

D. Sustainable consumption and production and the 10-year framework of programmes

73. In relation to sustainable consumption and production and the 10-year framework of programmes:

(a) Ensure changes in sustainable consumption and production patterns reduce the damaging effects of unsustainable production on workers, the environment and communities, and include a "just transition" strategy to deal with potential challenges that may arise in the process of transforming societies;

(b) Ensure governments rely more on public regulation and less on voluntary initiatives;

(c) Reform the shareholder value model of corporate governance and promote a stakeholder value model;

(d) Reform investment policies — currently, they are driven by a search for lower social and environmental standards;

(e) Address the entire production cycle and sustainability along the whole supply chain;

(f) Create a level playing field for consumers so they make their choices only between sustainable products;

(g) Integrate the needs of small and medium enterprises and their workers when implementing sustainable consumption and production policies;

(h) Enhance the potential of sustainable consumption and production for the creation of green and decent jobs in sustainable sectors;

(i) Promote a different organization of global production, based on a fair share of the supply of natural resources, not on the demands of affluent consumers;

(j) Adopt an integrated approach to advancing sustainable consumption and production across government departments, avoiding fragmented actions resulting from a lack of coherence in policy instruments;

(k) Promote sustainable public procurement practices.

E. Waste management

74. In relation to waste management:

(a) Increase research and disseminate information on the impacts of unsustainable waste management on public health and the environment;

(b) Improve job quality and ensure decent working conditions in this sector and recognize that workers carry out dangerous, unskilled and low paid work;

(c) Fight corruption and illegal transportation in the waste sector;

(d) Enforce a "3 Rs" strategy: reduce, reuse, recycle;

(e) Treat waste as close to the source as possible;

(f) Implement tracking, monitoring, sanction and compensation systems to better address illegal trafficking of hazardous waste;

(g) Introduce extended producer responsibility and accountability;

(h) Focus on political commitment and institutional coherence, indispensable aspects, completing technology development;

(i) Build capacity for management, consultation, listening and information exchange.

VII. Business and industry

75. As both private and public sector financing become more constrained, it is critical to set priorities for action and determine how resources can be leveraged and cost-effectively deployed in the context of returning to economic growth.

76. Business and industry see the Commission on Sustainable Development 2010-2011 thematic cluster as being at the heart of greening and growing the global economy. Business and industry urge attention for policies that will foster greener technologies, production methods and livelihoods in all areas. Business and industry support:

(a) Responsible and integrated approaches at market, regulatory, standard and voluntary levels in the diverse areas of transport, chemicals, mining and waste management;

(b) Shared responsibility, engagement and cooperation, as well as global efforts to assure the proper management of materials and products throughout their life cycles, through the collective and cooperative market-based efforts of governments, industry and consumers;

(c) Policies that work in synergy with open trade and investment to promote economic development and sustainability;

(d) Sound, enforced regulation and good governance that relies on sound science, risk management, the market and voluntary approaches to supplement legal requirements;

(e) Technological and management system innovation to reduce environmental impacts and improve sustainability performance.

77. Infrastructure development is particularly critical to progress and requires:

(a) Legal frameworks to enable private entities to enter and operate in what are often State-controlled industries;

(b) Coordination of measures for efficient start-up and implementation;

(c) Allocation of risk through contractual agreements;

(d) Leveraging of official development assistance, promoting technological cooperation, public-private partnerships and innovative financing arrangements.

A. Chemicals

78. Business and industry support:

(a) The SAICM life cycle approach to chemicals and its core policy objectives;

(b) The strengthening of SAICM as an innovative model of a multi-stakeholder framework to advance sustainable development. Business and industry call upon governments to ensure the adequate resourcing of the SAICM secretariat to enable it to effectively achieve its mandate;

(c) Private-public partnerships as a catalyst for improved implementation. An example of this is the UNEP senior experts resource group;

(d) A combination of transparent, cost-effective, science-based regulations and voluntary initiatives. Industry-led initiatives, such as the ICCA Responsible Care initiative and Global Product Strategy, and the CropLife international obsolete stocks programme, can be effective instruments for achieving sustainable development, and institutional frameworks should encourage their further development;

(e) Effective regulations based on science and risk-based decision-making, leveraging existing information to reduce animal testing, promoting transparency and shared responsibility across the supply chain. This will promote public confidence that chemicals are safely managed throughout their life cycle;

(f) Enhanced capacity-building efforts working with business to address gaps in the developing world (e.g., lack of appropriate expertise, data and scientific information, resources and infrastructure).

B. Mining and metals

79. Business advocates an integrated approach throughout the value chain. This involves understanding the social, environmental and economic impacts of a material as it moves through its life cycle and taking action to ensure that, for the part of the life cycle they control, appropriate and effective stewardship activities are undertaken, and for the areas where they are not in direct control but have influence, they work with other actors in the life cycle to ensure they also do their part.

80. The International Council on Mining and Minerals (ICMM) supports:

(a) Reporting and assurance in line with the Global Reporting Initiative;

(b) Enhancing the socio-economic contribution of mining through the ICMM Resource Endowment Initiative as there is a strong need to clarify where responsibilities lie between government and industry;

(c) Incentives to advance safety performance that balance regulatory, enforcement and voluntary activities;

(d) The clarification of the boundaries of responsibility between companies, government and civil society organizations as to how to address community health issues;

(e) Work to reconcile traditional indigenous perspectives on land ownership and their ability to grant or restrict access, with the reality that most States assert ownership over sub-surface resources in the interests of the population as a whole;

(f) A regulatory context for the coexistence of artisanal and small-scale mining and large-scale mining;

(g) Collaborative approaches to ensure that governments deliver on their duty to protect human rights;

(h) A dialogue on post-closure implications for both people and ecosystems.

C. Sustainable consumption and production

81. Sustainable consumption and production efforts should avoid duplicating or undermining existing policies and programmes and make markets work for sustainable development. They should encourage:

(a) Innovation, ecodesign and market introduction of environmentally preferable products, technologies and techniques, while keeping technology options open as knowledge improves;

(b) Cleaner and leaner production, including industrial ecology, dematerialization and eco-efficiency;

(c) Improved supply chain efficiency, which is particularly imperative in the agricultural sector in order to improve farmers' access to inputs and knowledge and optimize the use of resources;

(d) Information on environmentally aware choices for consumption, including through eco-labelling that evolves from consultations with industry stakeholders;

(e) Minimizing the environmental footprint associated with post-consumer waste through integrated post-consumer waste management systems and policies;

(f) Business across all sectors to contribute to sustainable consumption and production solutions through research and development, technological and commercial innovation, product and performance standards development, and codes of practice;

(g) The global diffusion of environmentally preferable technologies and techniques by avoiding barriers to trade.

D. Transport

82. Technology innovation and deployment, investment in existing and new infrastructure are all critical for reducing emissions for all modes of transport. Business and industry priorities include:

(a) Enhanced efficiency to save fuel and reduce emissions in all modes of transport;

(b) Biofuels sourced from second or new generation biomass, which should be produced sustainably to minimize impacts on food crops and freshwater usage;

(c) Reduction of CO_2 emitted per ton of cargo through a combination of technological and operational developments, including through the introduction of newer and bigger ships designed to the Energy Efficiency Design Index of the International Maritime Organization (IMO);

(d) Exploring alternative fuel sources to help reduce emissions. For shipping, the IMO agreement on Regulations for the Prevention of Air Pollution from Ships is important;

(e) The safe disposal of ships that have reached the end of their life through the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships.

E. Waste management

83. Business and industry support flexible, socially acceptable, environmentally sound and cost-effective integrated waste management, based on sound scientific data, including risk and cost-benefit analyses. Priorities include:

(a) Strengthened business and multi-stakeholder initiatives and partnerships to address e-waste issues, such as the Global e-Sustainability Initiative, which aims to ensure these products are disposed of responsibly and material is reused or recycled wherever possible;

(b) A wider perception and implementation of shared responsibility along the entire supply chain.

84. Global trade in recyclable materials and access to recycling facilities worldwide is essential to economic development and reduction in final disposal. Restrictions in the Basel Convention that prevent such trade and the reasonable and integrated use of recycling facilities should be removed.

85. The use of alternative and environmentally recommended fuels, for example biomass resulting from the pulp and paper industry, should not be restricted. High standards of waste management should be maintained and the range of options available should be flexible.

VIII. Scientific and technological communities

A. Sustainable production and consumption

86. Sustainable patterns of consumption and production are needed to reduce the material and energy intensity of economies and the generation of waste. The goal should be a decoupling of economic growth from environmental degradation. This will require facilitating major social change through policies primarily in three fields: education and awareness-raising; incentives and regulation; and international agreement.

87. Education, awareness-raising and information sharing can support changes in consumer behaviour and thus function as a means towards more sustainable consumption and lifestyles. There is a need to develop national and international programmes of research and analysis, monitoring sustainable consumption and production indicators, and providing technical and financial support to developing countries.

88. It is essential to provide incentives and to develop regulatory frameworks for using a diverse set of tools and approaches that have proven their usefulness in advancing sustainable consumption and production, including:

- Sustainable procurement
- Guidelines for cleaner production and recycling
- Green building codes and standards
- Sustainable resource use measures
- Energy conservation and efficiency
- Eco-labelling and codes of conduct for advertising.

89. The 10-year framework of programmes must address the responsibility of developed countries for changing their unsustainable patterns of production and consumption, as well as the gaps and challenges faced by developing countries related to sustainable consumption and production, namely:

- Training and capacity-building
- Transfer of clean technologies.

B. Transport

90. Investment in engineering research and development must be increased in order to accelerate progress in transportation technologies towards lower emissions of air pollutants and greenhouse gases. The market penetration of technological innovations must be encouraged through appropriate economic incentive programmes and through multiple deployment efforts.

91. Further research and development, and deployment of advanced transport technologies will be essential, namely in:

- Battery technology development for electric vehicles
- Hybrid and flex fuel cars

- Development of alternative fuels, such as compressed natural gas, ethanol and biodiesel.

92. In developed countries and the urban areas of emerging economies, there is a need to reduce demand for personal vehicle transport, as well as for reducing long-distance road transport of goods. It is important to develop integrated and inter-modal mass transport systems, using sound scientific modelling.

C. Chemicals

93. Gaps in sustainable management of chemicals, throughout the life cycle, existing in both the public and private sectors, must be addressed by enhancing:

(a) Regulatory frameworks at national and international levels, addressing the possible risks for human health and the environment;

(b) Knowledge, information and data on chemical safety and toxicity;

(c) Education and awareness of the potential risks that chemicals pose;

(d) Human and technical capacity for risk assessment and sound chemicals management.

94. Practical measures at the international level should include:

(a) Launching an international mechanism to support education and capacity-building in the implementation of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Stockholm Convention on Persistent Organic Pollutants and the Basel Convention;

(b) Implementing the Globally Harmonized System of Classification and Labelling of Chemicals;

(c) Developing a global legally binding instrument on mercury;

(d) Establishing a global system for communicating risk and hazards.

95. Stakeholders should significantly enhance support for the development and use of safe, environmentally benign substances in replacement of more hazardous ones, often based on renewable raw materials. Governments and industry should encourage this "green chemistry" through increased research, education, incentives and favourable market conditions. There is a great need to increase international cooperation in the development and transfer of technology for safe chemical substitutes and in capacity-building for their production.

96. Moreover, there is a need to pay special attention to five emerging issues: nanotechnology and manufactured nanomaterials, chemicals in products, lead in paint, electronic waste and perfluorinated chemicals.

97. At the national level, priority areas for action should include:

(a) Strengthening national legislation, with international cooperation and training on enforcement and compliance;

(b) Integrating chemical management into national development priorities and budgets;

(c) Establishing mechanisms for intersectoral cooperation in all countries.

D. Waste management

98. Stakeholders worldwide should significantly enhance their efforts to maximize the "3 Rs" of waste management: reduce, reuse and recycle; having as an ultimate goal a zero-waste economy of closed materials and nutrient cycles.

99. Policies and measures must also include:

(a) More data collection, research, engineering, education and public information, with special attention paid to health and environmental risks. One of the biggest returns on investment in health comes from providing clean water, sanitation and efficient waste management;

(b) National and city governments should conceptualize and operate integrated sustainable waste management systems and extend the responsibility and accountability of waste producers;

(c) Special care must be applied to the management of hazardous wastes. Respective national regulatory frameworks must be established, monitored and regularly updated. All countries should become parties to and implement the Basel Convention.

E. Mining

100. It is fundamental that environmental and social impact assessments be undertaken, in consultation with the local communities, before extractive activities start, for both opencast and underground mining. Moreover, adequate environmental monitoring systems and regular socio-economic studies must be put in place for the life cycle of the mining operation. The respective regulatory frameworks at national and international levels should be enhanced, as well as corporate social and environmental responsibility and accountability. There is a need for more investment in targeted scientific research and engineering, and in upgrading mining education and training.

101. Special encouragement should be given to the development, transfer and application of technologies that are environmentally friendly, including technologies that reduce water and energy requirements. Technical and financial support should be provided to developing countries for:

(a) Strengthening the technical capacity of national institutions dealing with mining;

(b) Reinforcing capacity at the national and local level for establishing contracts with companies;

(c) Managing contracts with international mining companies;

(d) Organizing participatory processes.

102. The large physical footprint of surface mines should be carefully assessed and monitored, in order to reduce environmental impacts during mining and return the land to sustainable post-mining use.

IX. Farmers

103. Farmers want to be partners for sustainable development. Their goal is to foster methods that encompass environmental sustainability, animal welfare and food security. The neglect of natural resources, rural areas, and consequently farmers, women and indigenous people on the one hand and wasteful lifestyles and production on the other, continue to be barriers to eliminating hunger and thirst and providing a decent quality of life for all peoples. To this end the major farmer group submits the recommendations set out below.

A. Waste

104. Models for sustainable development must involve proper management of waste from farming operations. This involves minimizing agricultural waste while maximizing environmentally sound reuse and recycling.

105. Too often farmers in developing countries lack resources, knowledge and information about techniques and waste management procedures. Government education and incentive policies are needed on topics like biogas.

106. Reducing production losses and food waste is essential. The current levels of post-harvest losses of food are estimated at 40 per cent. FAO should study and update these figures. Action is then required throughout the food chain, including at the consumer level, to reduce food waste.

B. Chemicals

107. Agriculture employs both biology and chemistry to produce crops. Farming needs access to chemicals, but as with all technologies, proper use is essential. Support for integrated crop management and best practices will ensure application of the right amount at the right time and in the right manner.

108. Especially in developing countries, farmers need regulation, information campaigns, specific training and education in order to learn about the proper use of crop protection products and fertilizer.

109. Access to appropriately sized and priced products, plus best practices on their use, and availability of alternative products should be encouraged.

C. Transport

110. If handled correctly, transportation offers a number of win-win opportunities for employment, poverty reduction, and reduced environmental impact. Therefore, there is a need to invest in infrastructure — particularly roads and ports — to make supplies available to farmers, workers and industry and to provide access to markets.

111. A "corridors" approach, such as the efforts in Africa to build inward to the countryside from ports, should be a priority. The most environmentally friendly options must be prioritized. Transportation and storage facilities should be built in developing regions to reduce post-harvest losses and food waste.

D. Mining

112. Mining provides crop nutrients, materials for equipment and the infrastructure for communications which agriculture needs. Farmers call upon mining operators to further their efforts to work collaboratively with local communities, including indigenous peoples and farmers, and to respect the quality of and need for local water, including for agricultural use.

113. Wherever possible, action should be taken to reduce the footprint of mining and protecting biodiversity should be part of mining activities.

E. Sustainable consumption practices

114. Farmers are in agreement with the NGO group and consider sustainable consumption and production as the strategic path towards prosperity, to be achieved mindful of the limits to growth and the life support systems of the Earth.

115. Sustainable consumption and production must include the three pillars of sustainable development: social, economic and environmental.

116. In many developing countries, sustainable practices are difficult to implement due to the lack of financial resources, infrastructure, services, and access to science and appropriate technology. This represents a major constraint on the competitiveness, profitability and sustainability of the agriculture sector. Training, education and extension programmes are essential to transfer information from the scientific community and there is also a need to promote access to improved tools to minimize the use of resources, such as drip irrigation, and facilitate access to recycling schemes, such as composting and biogas.

117. Farmers' organizations engage farmers directly. As donors consider agriculture programmes, farmers emphasize that they believe that farmers' organizations are better placed than many governmental and other bodies to directly impact the lives and work of farmers.

118. Addressing the substantial losses of crops that occur after harvest, as indicated above, is essential. Proper storage, market signals, transportation and processing are needed — ironically often in the countries which can least afford to waste food. So, farmers also need to educate consumers and end-users about this issue, for once food is moved from the countryside to cities, vast percentages of it go to waste there.

F. Interlinkages

119. In relation to interlinkages:

(a) Foster techniques in sustainable system management rather than specific management projects. For farmers, this includes integrated crop and pest management and best practices in livestock production that support an ecologically sound approach;

(b) Stress the importance of scientific information, training and extension services to further adoption of these sustainable system techniques;

(c) The current levels of post-harvest losses of food must be reduced through better storage, transportation and processing. In addition, reducing food waste at an institutional and consumer level is in the power of everyone. This item links several themes including transportation, waste management and sustainable production and consumption;

(d) Globally, the issues of water supply, conservation and quality cut across all themes and industries;

(e) The farmers' major group remains concerned about the mechanisms to improve the lives, livelihoods and sustainable output of smallholder farmers. Farmers encourage the nineteenth session of the Commission on Sustainable Development to consider reiterating some of the key elements of the outcomes of the seventeenth session, including the need for information sharing on markets, the need for scientific research, and the role of microcredit. There is also a need to support women farmers, including through the recognition of land tenure.